NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offi-Address: COMMISSIONER FOR PATENTS

CONFIRMATION NO

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

ATTORNEY DOCKET NO.

NOTICE OF ALLOWANCE AND FEE(S) DUE

EXAMINER 38092 759n 06/04/2010 FEENEY, BRETT A OFFICE OF PATENT COUNSEL, CODE 004 NAVAL SURFACE WARFARE CENTER, CARDEROCK DIVISION PAPER NUMBER ARTHNIT

9500 MACARTHUR BLVD., BLDG M 3624 WEST BETHESDA, MD 20817-5700

DATE MAILED: 06/04/2010

FIRST NAMED INVENTOR 10/826.790 04/16/2004 James David McWhite 83,317 1376 TITLE OF INVENTION: SHIP STOWAGE AID ANALYSIS PROGRAM

FILING DATE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	09/07/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

APPLICATION NO.

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used I correspondence including ad below or directed off	or training the	nsmitting the ISSU Patent, advance on e in Block 1, by (a	TE FEE and PUBLI ders and notification of specifying a new	CATI of n	ON FEE (if requi naintenance fees w pondence address;	ired). I /ill be and/or	Blocks 1 through 5 sh mailed to the current (b) indicating a sepa	ould be completed where correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
NAVAL SURFA 9500 MACART	ATENT COUNSE ACE WARFARE C HUR BLVD., BLD	ENTI G M		OCK DIVISION		Con	tificate	of Mailing on Transc	
WEST BETHES	DA, MD 20817-57	00							(Depositor's name)
									(Signature)
					ᆫ				(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVE	ENTOR ATTORNEY DOCKET NO.		RNEY DOCKET NO.	CONFIRMATION NO.	
10/826,790	04/16/2004			James David McWhite				83,317	1376
TITLE OF INVENTION	: SHIP STOWAGE AII:	ANA	LYSIS PROGRAN	<u> </u>					
APPLN, TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE:	DUE	PREV. PAID ISSUE	S FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1510	\$0		\$0		\$1510	09/07/2010
EXAM	INER		ART UNIT	CLASS-SUBCLAS	S				
FEENEY, BRETT A			3624	705-007000					
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ess an assignee is ident h in 37 CFR 3.II. Comp	" Indic ied. Us A TO E	ation form e of a Customer BE PRINTED ON	or agents OR, alte (2) the name of a registered attorne 2 registered paten listed, no name w FHE PATENT (print	single y or a t attor ill be or typ the pa	e firm (having as a agent) and the name meys or agents. If a printed. se) atent. If an assigna assignment.	membes of uno nan	er a 2p to p to ee is 3	cument has been filed for
Please check the appropri	iate assignee category or	catego	ories (will not be pr	inted on the patent):		Individual Co	rporati	on or other private gro	up entity 🗖 Government
4a. The following fee(s) are submitted: Itsue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies				4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number overpayment, to Deposit Account Number					
	s SMALL ENTITY state	ıs. See	37 CFR 1.27.					ITTY status. Sec 37 CF	
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) ites Pat	will not be accepted ent and Trademark	from anyone other i Office.	than t	he applicant; a regi	stered.	attorney or agent; or th	e assignee or other party in
Authorized Signature						Date			
Typed or printed name				Registration No.					
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	U.S.C U.S.C USPT rden, s O NOT	811. The informatic . 122 and 37 CFR [O. Time will vary hould be sent to the SEND FEES OR (on is required to obtai 1.14. This collection depending upon the e Chief Information C COMPLETED FORM	n or r is est indiv Office AS TO	etain a benefit by the imated to take 12 r idual case. Any co r, U.S. Patent and D'THIS ADDRESS	he pub minuter mment Trader i. SEN	tic which is to file (and to complete, including s on the amount of tin ark Office, U.S. Depa D TO: Commissioner f	by the USPTO to process) g gathering, preparing, and the you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

NITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Offic Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/826,790	04/16/2004	James David McWhite	83,317	1376	
38092 75	90 06/04/2010	EXAMINER			
OFFICE OF PATENT COUNSEL, CODE 004 FEENEY, BRETT					
	E WARFARE CENTE	ART UNIT	PAPER NUMBER		
9500 MACARTHU	JR BLVD., BLDG M	3624			

WEST BETHESDA, MD 20817-5700

DATE MAILED: 06/04/2010

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 1312 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 1312 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

Application No. Applicant(s) 10/826,790 MCWHITE, JAMES DAVID Notice of Allowability Examiner Art Unit BRETT FEENEY 3624 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 05/13/2010. The allowed claim(s) is/are 1,15 and 21-38. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. __ 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). T Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

/Romain Jeanty/ Primary Examiner, Art Unit 3624

of Biological Material

9. Other _____.
/BRETT_FEENEY/

Examiner, Art Unit 3624

Application/Control Number: 10/826,790

Art Unit: 3624

DETAILED ACTION

 The following Notice of Allowance is in response to Applicant's submission received on 05/13/2010.

Allowable Subject Matter

2. Claims 1, 15 and 21 – 38 are allowed.

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

The closest prior art to the claimed invention is Lee et al. (July, 2002). Optimal Compartment Layout Design for a Naval Ship Using an Improved Genetic Algorithm. Marine Technology 39(3): 159-169 (herein Lee), Rapeli US 6,105,525, Advanced Surface ship Evaluation Tool (ASSET) Ship Design Synthesis Programs, 12/15/1996 (herein ASSET). However Lee, Rapeli, and ASSET neither alone or in combination, fail to disclose or teach the step of calculating/estimating the total storeroom deck area required for each rectangular storeroom type with respect to the calculated/estimated longitudinal ship section where the calculated/estimated total storeroom deck area is a product of summing the calculations of the estimated said total stowage aid deck area required for each said stowage aid type, multiplied by the designated said sectional percentage for each said rectangular storeroom type, and divided by the estimated said compartment utilization factor for each said rectangular storeroom type as recited in the claims (more specifically as recited in independent claims 1, 15 and 34).

Application/Control Number: 10/826,790 Page 3

Art Unit: 3624

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 3624

Conclusion

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Brett Feeney** whose telephone number is **571.270.5484**. The Examiner can normally be reached on Monday-Thursday, 7:30am-6:30pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **KAMBIZE ABDI** can be reached at **571.272.6702**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://portal.uspto.gov/external/portal/pair. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to 571-273-8300.

Application/Control Number: 10/826,790 Page 5

Art Unit: 3624

Hand delivered responses should be brought to the United States Patent and

Trademark Office Customer Service Window:

Randolph Building

401 Dulany Street

Alexandria, VA 22314.

/BRETT FEENEY/ Examiner, Art Unit 3624

/Romain Jeanty/ Primary Examiner, Art Unit 3624 June 1, 2010